

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
16 June 2005 (16.06.2005)

PCT

(10) International Publication Number
WO 2005/054453 A1

- (51) International Patent Classification⁷: C12N 9/10 95, 14471 Potsdam (DE). BÖRNKE, Frederik [DE/DE]; Am heiligen Brunnen 2, 06484 Quedlinburg (DE).
- (21) International Application Number: PCT/EP2004/013560 (74) Common Representative: BASF Aktiengesellschaft; 67056 Ludwigshafen (DE).
- (22) International Filing Date: 30 November 2004 (30.11.2004) (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 10356631.7 2 December 2003 (02.12.2003) DE
- (71) Applicant (for all designated States except US): BASF Aktiengesellschaft [DE/DE]; 67056 Ludwigshafen (DE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): EHRHARDT, Thomas [DE/DE]; Maulbronner Hof 49, 67346 Speyer (DE). REINDL, Andreas [DE/DE]; Brunhildestr. 24, 68199 Mannheim (DE). FREUND, Annette [DE/DE]; Römerweg 17c, 67177 Limburgerhof (DE). SCHMIDT, Ralf-Michael [DE/DE]; Am Schlossgarten 9d, 67489 Kirrweiler (DE). SONNEWALD, Uwe [DE/DE]; Am Hange 6, 06484 Quedlinburg (DE). STITT NIGEL, Marc [DE/DE]; Grosse Weinmeisterstr. 22a, 14469 Potsdam (DE). LEIN, Wolfgang [DE/DE]; Geschwister-Scholl-Str.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: 2-METHYL-6-SOLANYLBENZOQUINONE METHYLTRANSFERASE AS TARGET FOR HERBICIDES

(57) Abstract: The present invention relates to the use of 2-methyl-6-solanylbenzoquinone methyltransferase which, when absent, brings about retarded growth and chlorotic leaves, as target for herbicides. In this context, there are provided novel nucleic acid sequences comprising SEQ ID NO:5 and SEQ ID NO:7 and corresponding functional equivalents. Moreover, the present invention relates to the use of 2-methyl-6-solanylbenzoquinone methyltransferase and its functional equivalents in a method for identifying herbicidal or growth-regulatory compounds, and to the use of the compounds identified via the method as herbicides or growth regulators

WO 2005/054453 A1